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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

SCHNEIDER, CRAIG M

ART UNIT

PAPER NUMBER

3753

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,368

Applicant(s)

HUANG, CHAO YANG

Examiner

Craig M. Schneider

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it exceeds 150 words in length. It is important that the abstract does not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP § 608.01(b).

Claim 1 is objected to because of the following informalities: "valve" in line 5 should be --hole--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite because of the screw valve in line 3 of the claim, a safety valve and a screw cap together does not make a screw valve. Claim 10 is indefinite because of "may" in line 7 of the claim, the word may in itself is indefinite. Claim 12 is indefinite because of "safety valve and check valve" in lines 1 and 2, the term safety valve is a safety valve because of the check valve and to separate the two as in claim 12 is indefinite. Claims 2-9, 11, and 13-14 are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

Art Unit: 3753

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 2, 15-16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lau (6,684,004).

Lau discloses a valve (10) comprising, in combination, a valve cup (12) having a fill hole (36) and a screw valve (42) comprising a safety valve (14 and 16 and 18) (col. 2, lines 20-26), wherein the safety valve is removably inserted into the fill hole to function as a stopper for the fill valve (col. 4, lines 35-40) and a screw cap (20).

Lau further discloses that the safety valve and the screw cap are integrally connected when they are assembled.

Lau further discloses that the safety valve further comprises a seal portion (76)(col. 3, lines 7-20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lau as applied to claim 1 above, and further in view of Morton (3,147,763).

Lau discloses all the features of the claimed invention except that the cap has exterior grooves. Morton discloses that the cap (18) has exterior grooves (21) as seen in Figure 1 (col. 2, lines 46-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the exterior grooves of Morton's cap onto the cap of Lau, in order to provide a better grip on the cap.

Claim 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lau in view of Cavenagh (6,929,021).

Lau discloses a valve comprising a valve cup, the valve cup having a valve chassis (40) surrounding a fill valve hole; a stopper, the stopper being removably inserted into the valve hole and comprising a safety valve; and the cap, the cap being removably screwable onto the valve chassis to secure the stopper in the valve hole. Lau discloses all the features of the claimed invention except that the cap has a hole through which the safety valve is able to be accessed. Cavenagh discloses that the cap (12) has a hole (32) as seen in Figure 1 through which the safety valve (35) is able to be accessed (col. 6, lines 26-30). Cavenagh further discloses that the cap is integrally connected to the stopper (35) (col. 6, lines 26-35). Cavenagh further discloses that the stopper further comprises a seal portion (36) (col. 6, lines 26-35).

It would be obvious to one having ordinary skill in the art at the time the invention was made to use the safety valve, screw cap, and safety cap combination of Cavenagh

Art Unit: 3753

onto the valve of Lau, in order to have a securing means for the safety valve when the device is being deflated.

Allowable Subject Matter

Claims 17, and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art discloses or renders obvious "a safety cap that is removably insertable into the stopper portion" in addition to the other elements of structure claimed.

Claims 3-6, 8-9, 12, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims. None of the prior art discloses or renders as obvious "a safety cap that is removably insertable into the stopper portion" in addition to the other elements of structure claimed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walker (4,766,628), Po (4,924,899), Lind et al. (5,203,831), Peterson (6,814,639), and Wu (6,874,524) disclose other types of inflation/deflation valves.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig M. Schneider whose telephone number is (571) 272-3607. The examiner can normally be reached on M-F 8:30 -5:00.

Art Unit: 3753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Blau can be reached on (571) 272-4406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMS
November 17, 2005


Craig Schneider
Patent Examiner
Art Unit 3753


STEPHEN BLAU
PRIMARY EXAMINER